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PROBLEMS AND PROSPECTS OF CONTEMPORARY DISTANCE LEARNING TECHNOLOGIES IN UNIVERSITIES IN NIGERIA

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Abstract

The study examined the problems and prospects of contemporary distance learning technologies in universities in Nigeria. The study was carried out in Enugu State, Nigeria. The study adopted a descriptive survey design. Three research questions and one null hypothesis guided the study. The population for the study was 280 respondents, consists of 102 facilitators (52 from the University of Nigeria, Nsukka and 50 from National Opening University) and 178 students (108 from the University of Nigeria and 70 from National Open University). There was no sampling because the population was a manageable size. A twenty-four structure questionnaire was used to illicit information from the respondents. The instrument for data collection was structured questionnaire titled: Contemporary Distance Learning Technologies Questionnaire (CDLTQ) developed by the researchers to generate data for the study. The instrument was faced validated by three experts. To determine the internal consistency of the instrument, the Cronbach Alpha method was used. The overall reliability co-efficient of 0.84 was obtained for the instrument. Data collected were analyzed using mean and standard deviation while the null hypothesis was tested at 0.05 level significance using t-test statistics. The findings of the study revealed the role of Information and Communication Technology in distance learning and challenges facing ICT usage, integration and the need to promote long-term policies outcomes when evaluating distance learning programmes. The findings of the study also revealed that there is high hope and enthusiasm for distance learning as the nation is faced with inadequacies in essential services and infrastructures: electricity, postal and telecommunication services and so on. Based on the findings of the study, some recommendations were proposed.

Keywords: Distance learning, Technologies, ICT, Nigerian universities

Introduction

The introduction of Information and Communication Technology (ICT) usage and integration has initiated a new age in educational methodologies, thus, it has radically changed the traditional methods of teaching and learning patterns in the domain as well as offering contemporary learning experiences to both the facilitators and the students. However, distance learning is proved to be regarded as an independent form of training in the institution of lifelong learning. United Nations Educational, Scientific and Cultural Organization (2005) defined distance learning as the provision of whatever educational opportunities are needed by anyone, anywhere, at anytime for those who otherwise would have been denied. UNESCO, further explain that improving the quality of education through the diversification of contents, methods and promoting experimentation, innovation, sharing of information and best practices as well as policy dialogue are UNESCO's strategic objectives in Education (UNESCO, 2002). According to Khalilova, Yakubova and Daukaeva (2020) defined distance learning as a system of learning that allows individuals to acquire necessary skills and new knowledge through a personal computer (PC) and to access the Internet. The authors further viewed distance learning as the location of personal computer to individuals to study at home, workplace, online or anywhere there is PC with an internet connection (Khalilova, Yakubova & Daukaeva, 2020). Operationally, distance learning, also known as distance learning is a type of learning in which there is usually a departure among the instructors and the learners. Therefore, it includes one which others may refer to as a means of the written and printed word, such as telephone, computer conferencing or teleconferencing used to bridge the physical gap between the instructor and the learner. Interestingly, one of the important purposes of distance learning is to provide an opportunity of education, often on an individual basis, to learners who are not physically present in a classroom. Moreso, it provides equity in educational opportunities by allowing access to quality education for those who otherwise would have been denied. According to the Federal Republic of Nigeria (2004) through its national policy on education also detailed that the goal of distance learning is to:

- Provide access to excellence education and equity in educational opportunities for those who otherwise would have been denied.

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- Meet special needs of employers by mounting special certificate courses for their employees at their work place.
- Encourage internationalization especially of tertiary education curricula.
- Restructure the effect of internal and external brain drain in tertiary institutions by utilizing Nigerian experts as teachers regardless of their locations or places of work (p. 45).

As a result, the federal government of Nigeria is convinced that for universities in Nigerian to make best possible contribution to national development, ICTs are essential ingredient to foster its implementation. Though, the integration of Information and Communication Technologies (ICTs) in distance learning programmes in Africa has not been encouraging and has been the topic of a good deal of debate globally (Nwachukwu, Andrew & Ossai, (2006). It could interest to review some of the benefits of distance learning in universities in Nigerian.

The aim of distance learning is to provide a strong communication between the facilitators and the students. Interestingly, the major benefit of distance learning to students is that students can study wherever, whenever, and whatever they want. Therefore, flexibility is the most important benefits of distance learning. Other benefits of distance learning as posited by Mümine and Selma (2016) are as follows: It provides the students the convenience of course materials being delivered at home or office; students may gain useful, transferable skills, such as planning and research; students can make their feedback easily; there is no waste of time in transport; accessing students without face-to-face learning opportunities; it provides just-in-time learning; it is associated with technology more than face-to-face learning; it provides wider audience; it can facilitate greater learner-instructor interaction; it provides equalize access to education; it makes information and lecture notes open to everyone; it minimizes the costs of stationery; and increases the effectiveness of education through the use of items such as sound and image. In addition, distance learning provides equal opportunities to all people, regardless of social status (schoolchildren, students, civil and military, unemployed, etc.) in any part of the country and abroad to realize human rights to education and information (Ifinedo, 2006). Apparently, Obuekwe and Eze (2017) postulated that distance learning could be seen as a tool to restructure several challenges facing universities in Nigeria including the move towards lifelong learning, demand for continuous professional development, and the drive to wider participation. Distance learning according Obuekwe and Eze (2017) posited that based on the benefits it provides in educational sector is valuable in ways such as: Increase in accessibility to information, it provides massive online open courses with much attention; it prompt novel approaches to teaching and learning in Nigerian universities; it provides learning anytime and anywhere; it increases retention of knowledge; it provides online materials as assignments before peer and tutor interactions with the purpose of enhancing the learning process and improving preceptorship; it engaged learners to progress at their own pace without any feeling of frustration; it is fuelled by the use of sophisticated learning tools, media and ICT is aimed at augmenting the learners' experience thus making education learner-centred; It builds confidence in learners as it increases retention due to hands on application unlike in traditional teaching and learning methods; and it relieve the accessibility to distance learning facilities which provides opportunities for professional development of workers. In a research carried out by Ifinedo (2006) posited that there is no institutions to achieve successful distance learning technologies without enlightening the facilitators and the students on challenges of distance learning.

Furthermore, Nwagwu and Ahanihe (2006) posited efforts to improve ICT access in Nigeria universities which have been hampered by a number of challenges, these are summarized as follows: prospective ICT users that have expertise, competencies and equipment to benefit from access to electronic information networks are minute in number; shortage and high costs of equipment, software and information compared to situations in the industrialized nations; lack of reliable and accessible physical telecommunications infrastructure; telecommunications monopoly, associated with overly restrictive regulations and high costs, and lack of interregional networking and cooperation amongst national universities and international institutions. In the same vein, Commonwealth of Learning International (2001), made it clear that the inadequacy of essential services and infrastructure like electricity, telecommunications and postal services could must be developed to levels that could support the declared scale of open and distance learning in order to increase administrative network and develop a proper link between faculty and students learning.

Perhaps, another most serious challenge facing distance learning at this level in Nigeria is the need for the integration of new ICT literacy knowledge into academic courses and programmes (Igwe, 2005). This state of affairs grew mainly from the political isolation that Nigeria experienced during the military eras. However, Nigeria's professionals were not able to benefit from international assistance and lack of international networking and cooperation or from courses, conferences and seminars abroad. This denial of assistance and interaction has adverse consequences, both on the psyche of faculty and on the development of infrastructure necessary for professional development (COL International, 2001).

Ajayi and Folorunso (2008) found that mass unawareness, low computer literacy level and cost were identified as critical factors affecting the acceptability of distance learning by students and lecturers in universities in Nigerian. Sharma, Ekundayo and Ng (2009) points out that distance learning place high demand on learners who have to be more proactive and disciplined than in traditional face-to-face education. Interestingly, Resnick, Berg and Eisenberg (2000) criticizes that even though ICT is applied in education, the approaches to teaching and learning remain largely unchanged. In order to entirely profit from the new contemporary technologies, educational approaches and concepts on how technology can support them could be fundamentally rethought. Schulmeister (2006) states that experience proved

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that the benefits of distance learning could not be fully taken advantage of, expectations could not be met and that technology often was used to simply reinforce outmoded approaches to learning. Investigations indicate that the formidable challenge facing National Open University of Nigeria (NOUN), is lack of financial support to build the required infrastructure and to produce learning materials for its over 9,000 students registered in the first year, Omofaye J.O. (2007). Research by Ajayi and Folorunso (2008) further reviewed other challenges faced by distance learning, such as: Internet connectivity which is still on the high side. Hence, some students find it a challenge to afford. Aduke (2008) posited that the government could make Internet connectivity a priority for higher education to be able to leverage on the promises and opportunities ICTs present. Other challenges as listed by the author include: irregular and frequent interrupted power supply in Nigeria; inadequate trained personnel and electricity instability (Fredrick, 2014).

Importantly, Adavbiele (2016) postulated that among the factors that affect the technologies use in developing countries such as: availability of equipment, sufficient equipment, up-to-date equipment, maintenance of the equipment, infrastructure, staff training and development, technical staff support, vision and incentives, time factor, and other relevant support but yet there is need to inculcate the use of ICT technology tools in universities to enhance quality of teaching and learning among the facilitators and students in distance learning. Some of these strategies to enhance teaching and learning includes: provision of computers, internet and intranet facilities; government controls, especially taxation and censorship; increasing commercial use of the Internet has heightened security and privacy concerns; training and re-training is required; making computers available to all lecturers and students can enhance the use ICT; appropriate rooms or buildings available to house the technology and provision of appropriate and sufficient support for the training instructors or facilitators.

Importantly, the use of modern technologies in distance learning across universities in Nigerian is beginning to emerge fast over the last decade. In Nigeria, scholars acknowledge that more than a few factors affect the integration to successful improvement of distance learning programmes. Since this is the case, it was reasonably impossible to consider all the factors. Therefore, the purpose of this study is not to look into such factors that hinder distance learning technologies in teaching and learning in Nigerian universities but to address the problems and prospects of ICTs in relation to contemporary distance learning technologies in Nigeria. Furthermore, the key statement of this research study is that the effective use of ICTs for distance learning addresses both the problem and prospects to technology based learning, seeking synergistic results that benefit distance learning students as they graduate and carry out their duties. Purposely, this study also gazed at the contexts of distance learning in universities in Nigerian, the role of ICT in distance learning and the challenges facing ICT usage and needs to promote long-term policies outcomes when evaluating distance learning programmes in universities in Nigerian.

Statement of the Problems

The call for utilization of contemporary distance learning technologies in universities in Nigerian on instructional delivery is to introduce and bring in efficiency and effectiveness in curriculum implementation. Thus, in Nigeria, distance learning is challenged with the problem of technologies devices such as computer, computer laboratories, internet and email facilities, videophone systems and teleconferencing devices, fax and wireless applications, digital library, digital classrooms, multimedia systems and the problem of multimedia courseware development among others. Other studies indicates that there is lack of professional trained and skills facilitators or instructors for distance learning programme such as lack of facilities, infrastructures and equipments. It is against this background that the present study was carried out to investigate the problems and prospects of contemporary distance learning technologies in universities in Nigeria.

Purpose of the study

The general purpose of the study was to investigate the problems and prospects of contemporary distance learning technologies in universities in Nigeria. Specifically, the study sought to:

1. determine the challenges that face ICT usage in distance learning in Universities in Nigerian?
2. ascertain the benefits of ICT usage in distance learning in Universities in Nigerian?
3. determine the strategies to enhance ICT usage in distance learning in Universities in Nigerian?

Research Questions

The following research questions guided the study:

1. What are the challenges that face ICT usage in distance learning in Universities in Nigerian?
2. What are the benefits of ICT usage in distance learning in Universities in Nigerian?
3. What are the strategies to enhance ICT usage in distance learning in Universities in Nigerian?

Research Hypothesis

$H0_1$ There is no significant difference between the mean ratings of the facilitators and students on the challenges of ICT usage in contemporary distance learning technologies in Universities in Nigerian.

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MATERIALS AND METHODS

The study adopted a descriptive survey design. The study was carried out in selected universities in Enugu State, Nigeria. The population for the study was 280 respondents, consists of 102 facilitators (52 from the University of Nigeria, Nsukka and 50 from National Opening University) and 178 students (108 from the University of Nigeria and 70 from National Open University). There was no sampling because the population was a manageable size. A twenty-four structure questionnaire was used to illicit information from the respondents. The instrument for data collection was structured questionnaire titled: Contemporary Distance Learning Technologies Questionnaire (CDLTQ) which was developed by the researchers to generate data for the study. Each of the 24 items survey instrument was structured on a four point response options of the Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree with corresponding values of 4, 3, 2 and 1 respectively. The instrument was faced validated by three experts, one from the Department of Adult Education, one from the Department of Educational Foundations, and one from Department of Science Education (Measurement and Evaluation Unit), all from the Faculty of Education, University of Nigeria, Nsukka. To determine the internal consistency of the instrument, the Cronbach Alpha method was used. The overall reliability co-efficient of 0.84 was obtained for the instrument. Data collected were analyzed using mean and standard deviation while the null hypothesis was tested at 0'05 level significance using t-test statistics.

RESULTS

Research Question One: What are the challenges that face ICT usage in distance learning in Universities in Nigerian?

Table 1: Mean rating and standard deviation on challenges that face ICT usage in distance learning in Universities in Nigerian

S/N	Items Statement	Facilitators (102)			Students (178)		
		M	SD	Decision	M	SD	Decision
1	Lack of reliable and accessible physical telecommunications infrastructure	2.89	0.70	**A**	2.62	0.55	A
2	Lack of interregional networking and cooperation among universities	2.63	0.73	**A**	2.38	0.57	A
3	Low computer literacy level and cost	2.34	0.76	**A**	2.70	0.55	A
4	lack of financial support to build the required infrastructure	2.54	0.74	**A**	2.80	0.54	A
5	Irregular and frequent interrupted power supply	2.86	0.71	**A**	2.48	0.56	A
6	Lack of trained personnel and electricity instability	2.77	0.72	**A**	2.59	0.56	A
7	Lack of quality e-content	3.00	0.69	**A**	2.69	0.55	A
8	Lack of awareness	2.97	0.70	**A**	2.66	0.55	A
9	Telecommunications monopoly, associated with overly restrictive regulations and high costs	2.65	0.73	**A**	3.00	0.52	A
	Aggregate Mean Score	**2.74**	**0.72**	**A**	**2.66**	**0.55**	**A**

Data presented in table 1 shows the mean scores and standard deviation of challenges that face ICT usage in distance learning in Universities in Nigerian. Table 1 indicates that items 1-9 had mean scores above criterion mean of 2.50 which showed that they are the major challenges that faces ICT usage in distance learning in Universities in Nigerian, with a grand mean scores and standard deviation of 2.74 and 0.72 (facilitators), 2.66 and 0.55 (students) respectively, which shows that the above statement are strongly agreed to be the challenges facing ICT usage in Universities in Nigerian.

Research Question Two: What are the benefits of ICT usage in distance learning in Universities in Nigerian?

Table 2: Mean ratings and standard deviation on benefits of ICT usage in distance learning in Universities in Nigerian

S/N	Items Statement	Facilitators - 102			Students - 178		
		M	SD	Decision	M	SD	Decision
10	Distance learning provides students opportunities to study wherever, whenever, and whatever they want.	2.68	0.72	**A**	2.71	0.55	**A**
11	It provides students the convenience of course materials being delivered at home or office	2.57	0.74	**A**	2.55	0.56	**A**
12	It provides feedback easily	2.34	0.76	**A**	2.99	0.53	**A**
13	There is no waste of time in transport;	2.90	0.70	**A**	2.70	0.55	**A**
14	It provides wider audience	2.81	0.71	**A**	3.00	0.52	**A**

15	It makes information and lecture notes open to everyone	2.72	0.72	**A**	2.91	0.53	**A**
16	It minimizes the costs of stationery	2.76	0.72	**A**	2.49	0.56	**A**
17	It provides equal opportunities to all students, regardless of social status.	2.88	0.70	**A**	2.66	0.55	**A**
	Aggregate Mean Score	**2.71**	**0.72**	**A**	**2.75**	**0.54**	**A**

Data presented in table 2 shows the means scores and standard deviation on the benefits of ICT usage in distance learning in Universities in Nigerian. Table 2 indicates that, items 10-17 had mean scores above the criterion mean of 2.50 which showed that items above are the benefits of ICT usage in distance learning in Universities in Nigerian. With aggregate mean score of 2.71 and a standard deviation of 0.72 for facilitators and a mean score of 2.75 and a standard deviation of 0.54 for students respectively. The table also shows that the above items mentioned are agreed to be the benefits of ICT usage in distance learning in Universities in Nigerian.

Research Question Three: What are the strategies to enhance ICT usage in distance learning in Universities in Nigerian?

Table 3: Mean ratings and standard deviation on strategies to enhance ICT usage in distance learning in Universities in Nigerian.

S/N	Items Statement	Facilitators (102)			Students (178)		
		M	**SD**	**Decision**	**M**	**SD**	**Decision**
18	Provision of computers, internet and intranet facilities	2.89	0.70	**A**	2.99	0.53	**A**
19	Government controls, especially taxation and censorship	2.70	0.72	**A**	2.79	0.54	**A**
20	Training and re-training of facilitators	2.57	0.74	**A**	2.89	0.53	**A**
21	Making computers available to all lecturers and students can enhance the use ICT	2.62	0.73	**A**	2.54	0.56	**A**
22	Appropriate rooms or buildings available to house the technology	2.82	0.71	**A**	2.64	0.55	**A**
23	provide appropriate and sufficient support for the teachers	2.91	0.70	**A**	2.75	0.54	**A**
24	Maintenance of the equipments and infrastructures	2.49	0.74	**A**	2.85	0.54	**A**
	Aggregate Mean Score	**2.71**	**0.72**	**A**	**2.78**	**0.54**	**A**

Data presented in table 3 above shows the result of respondents that agreed to all the seven (7) items presented with a mean ranging from 2.49 to 2.99 as it regards the strategies to enhance ICT usage in distance learning in Universities in Nigerian, with a mean score of 2.71 and a standard deviation of 0.72 (facilitators) and a mean score of 2.78 and a standard deviation of 0.54 (students) respectively. Thus, this indicates that the above items statements agreed to be the strategies to enhance ICT usage in distance learning in Universities in Nigerian.

Table 4: Research Hypothesis

$H0_1$: t-test analysis of facilitators and students on the challenges of ICT usage in distance learning technologies in Universities in Nigerian.

	N	**Mean**	**St. Dev.**	**Df**	**$t_{cal.}$ Value**	**Sig. (2_{tailed})**	**Decision**
Facilitators	108	2.72	0.70	95	1.96	0.05	Accepted
Students	172	2.73	0.55				

Data presented on table 4 show the summary of t-test analysis on the difference between the mean scores of the facilitators and students on the challenges of ICT usage in contemporary distance learning technologies to enhance teaching and learning in universities in Nigeria. The null hypothesis was accepted because the t-calculated value of 1.96 is less than the t-critical value of 0.05. Since the associated propability was higher than 0.05 levels significant, the null hypothesis was accepted as stated. Therefore, it was concluded that there is no significant difference between the mean scores of facilitators and students on the challenges of ICT usage in contemporary distance learning technologies in universities in Nigerian.

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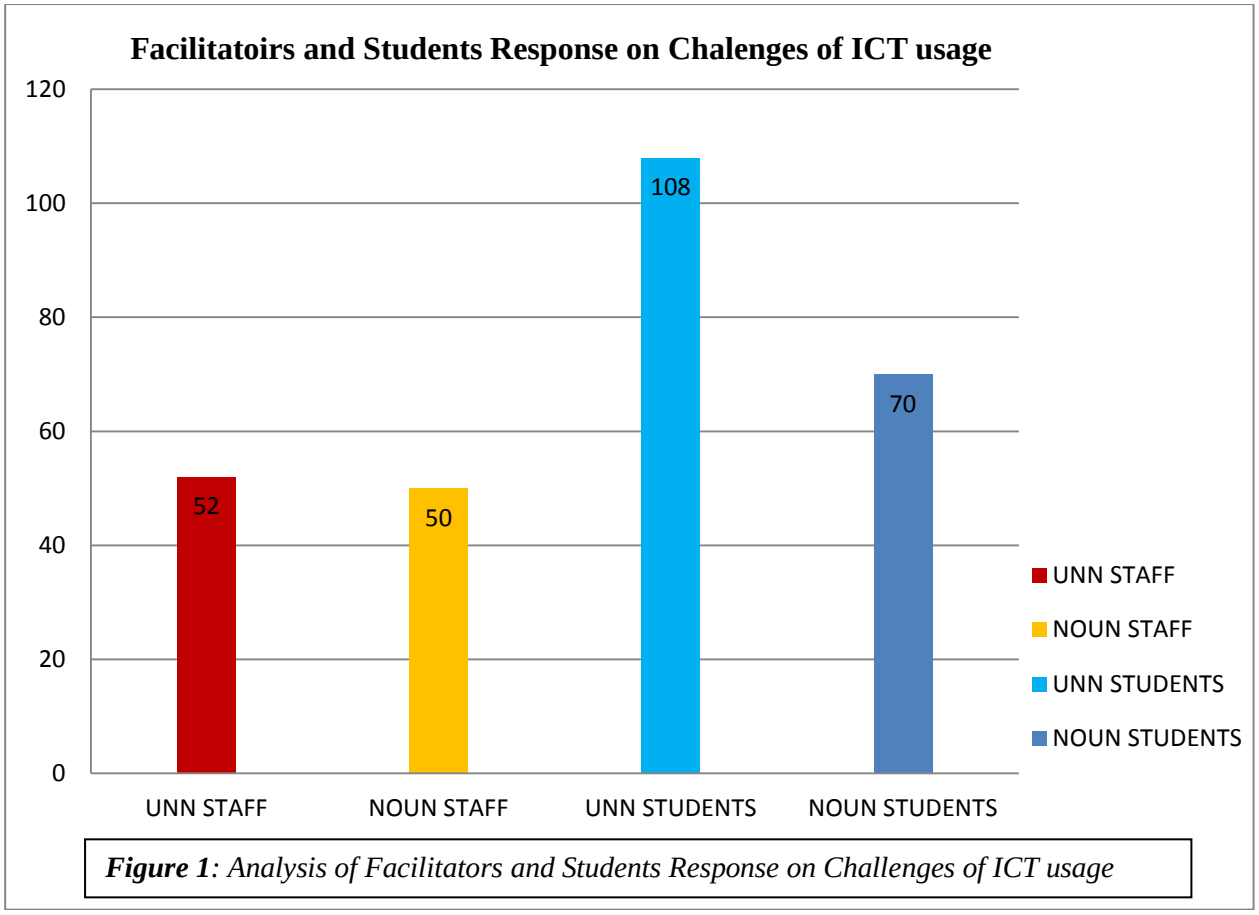

***Figure 1**: Analysis of Facilitators and Students Response on Challenges of ICT usage*

***Source:** Authors' Computation from the Database of CDLTQ*

The figure 1 above is a graphical illustration of the numbers of the facilitators and students that responded on the challenges of ICT usage in contemporary distance learning technologies in Universities in Nigerian. In summary, the figure shows that the students in the University of Nigeria, Nsukka has the highest responses on the challenges of ICT usage in contemporary distance learning technologies in universities in Nigerian with the overall mean score of 108% against the students of National Open University of Nigeria by 70%.

DISCUSSION

The findings of the study in research question one revealed the challenges that face ICT usage in distance learning in Universities in Nigerian, which include lack of reliable and accessible physical telecommunications infrastructure; lack of interregional networking and cooperation among universities; low computer literacy level and cost; lack of financial support to build the required infrastructure; lack of internet connectivity; irregular and frequent interrupted power supply; lack of trained personnel and electricity instability; lack of awareness and lack of quality e-content.

The findings of the study is in line with the findings of Nwagwu and Ahanihe (2006) who posited efforts to improve ICT access in Universities in Nigerian which have been hampered by a number of challenges, these are summarized as follows: prospective ICT users that have expertise, competencies and equipment to benefit from access to electronic information networks are minute in number; shortage and high costs of equipment, software and information compared to situations in the industrialized nations; lack of reliable and accessible physical telecommunications infrastructure; telecommunications monopoly, associated with overly restrictive regulations and high costs, and lack of interregional networking and cooperation amongst national universities and international institutions. The findings is also in consonant with the findings of Ajayi, and Folorunso (2008) who posited that mass unawareness, low computer literacy level and cost were identified as critical factors affecting the acceptability of distance learning by students and lecturers of Universities in Nigerian.

The findings of the study in table 2 revealed the benefits of ICT usage in distance learning in Universities in Nigerian which include: it provides students opportunities to study anytime and anywhere; it provides massive online open courses with much attention; it provides students the convenience of course materials being delivered at home or office; it provides feedback easily; there is no waste of time in transport; it provides wider audience; it provides

equalize access to education; it makes information and lecture notes open to everyone; it minimizes the costs of stationery; and it provides equal opportunities to all people, regardless of social status in any part of the country. The findings of the study is in consonant with the finding of Mümine and Selma (2016) who posited the followings as benefits of ICT usage in distance learning in Universities in Nigerian which include provision of students with the convenience of course materials being delivered at home or office; providing students the opportunity to gain useful, transferable skills, such as planning and research; and the opportunity for students to make their feedback easily without waste of time in transport or face-to-face learning opportunities.

The findings of the study revealed strategies to enhance ICT usage in distance learning in Universities in Nigerian which include government controls over taxation and censorship; increasing commercial use of the Internet has heightened security and privacy concerns; training and re-training is required; making computers available to all lecturers and students can enhance the use ICT; appropriate rooms or buildings available to house the technology and provide appropriate and sufficient support for the teachers. The findings of the study is in consonants with the findings of Adavbiele (2016) who maintained that among the factors that affect the technology use in developing countries, there are strategies to enhance ICT usage in distance learning in Nigerian Universities which include availability of equipment, sufficient equipment, up-to-date equipment, maintenance of the equipment, infrastructure, staff training and development, technical staff support, vision and incentives, time factor, and other relevant support. The author further posited other strategies to enhance ICT usage in distance learning in Universities in Nigerian which includes: provision of computers, internet and intranet facilities; government controls, especially taxation and censorship; increasing commercial use of the Internet has heightened security and privacy concerns; training and re-training is required; making computers available to all lecturers and students can enhance the use ICT; appropriate rooms or buildings available to house the technology and provision of appropriate and sufficient support for the training instructors or facilitators.

CONCLUSION

At present, distance learning is broadly utilized in diverse grounds of education, the use of complex educational technologies in the system of distance education in our speedily growing society, where the stream of information is persistently efficient; add to the growth of any educational institutions, as well as a variety of fields. That is why, as an instructor or facilitator and a constantly learning staff, the society are conscious of the most modern information in accord with the desires of our career with experts in the field to deliver this information to students at a distance. However, this form of education is indivisible from making, with its rewards of being capable to exercise in a relaxing place and at a suitable period. Importantly, it is also measure to centre concentration towards factors to advance the usefulness and improve delivery of distance learning in Universities in Nigerian so as to assure the needs of all stakeholders of education to a huge level.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. For distance learning to be effective, proper measure should be specified to maintenances, provision of steady internet provider to sustain simple and quick learning.
2. Fundamental awareness on how to operate computer related equipments should be given to both the students and instructors.
3. Curriculum planner should try to incorporate efficient practical accomplishment plan and how learner of distance learning can be evaluated in order for optimal functional education.
4. Electricity is one of the motivated strength and computer tools, so Government should invest and connect Universities in Nigerian to a steady electric network.
5. The responsibility for distance learning programme for students and instructors should be extended to all stakeholders and not limited to only Nigerian universities.
6. Inadequate power supply and funding remains a bottleneck to the development of e-learning in Universities in Nigerian in the public sector. The tertiary education system stands to benefit immensely from cutting-edge ICT equipment, stable power supply and an increased budget allocation for e-learning initiatives. There is need to increase the annual allocation on education by the government at both the federal and state cadre to facilitate adequate provision of e-learning equipment and steady power supply in the universities.
7. It should be made mandatory for all lecturers and students to have computer, way of providing soft loan either by institutions or government of Nigeria.

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REFERENCES

Adavbiele, J. A. (2016). The use of ICT to enhance university education in Nigeria. *International Journal of Education, Learning and Development, 4*(5), 1-11. Retrieved from: https://www.eajournals.org/wp-content/uploads/The-Use-of-ICT-to-Enhance-University-Education-in-Nigeria..pdf

Aduke, A.F. (2008). Usage and challenges of information and technology (ICT) in teaching and learning in Nigerian universities. *Asian Journal of Information Technology*, 7(7), 290-295.

Ajayi, F. A. & Folorunso, A. (2008). Towards effective use of information and communication technology for teaching in Nigerian colleges of education. *Asian Journal of Information Technology*, 7(5), 210 – 214.

Ajadi, T. O., Ibrahim, O. S. & Femi, A. A. (2008). E-learning and distance education in Nigeria. Turkish Online Journal of Educational Technology, *7*(4), 503-507. Retrieved from: https://files.eric.ed.gov/fulltext/ED503472.pdf

Commonwealth of Learning International (2001). *Building Capacity to Deliver Distance Education in Nigeria's Federal University System.* Report prepared for the World Bank. Retrieved from: http://siteresources.worldbank.org/NIGERIAEXTN/Resources/capacity_de.pdf

Fredrick, F. T (2015). Prospects and challenges of e-learning in Nigerian university education using national open university of Nigeria Akure Study Center. Research Thesis, Department Of Science and Technical Education, Ajasin University, Akungba Akoko

Fredrick, O. W. (2014). Cooperatives and the sustainable development goals: A contribution to the Post-2015. *Development Debate.* A policy brief. Retrieved from: https://www.ilo.org/empent/Publications/WCMS_240640/lang--en/index.htm

http://siteresources.worldbank.org/NIGERIAEXTN/Resources/capacity_de.pdf

Ifinedo, P. (2006). Acceptance and continuance intention of web-based learning technologies (WLT) among university students in a Baltic Country. *Journal of Information Systems in Developing Countries, 23*(6), 1-20.

Igwe, U. O. (2005). Harnessing information technology for the 21st Century: Library Education in Nigeria. *Library Philosophy and Practice, 7*(2), 23 – 30

JAMB (2016). JAMB Statistics: Application and Admission (UTME), Retrieved from: https://jambadmission.com.ng/jamb-2016-statistics-for-universities/

Khalilova, L., Yakubova, M. & Daukaeva, S. (2020). Modern trends of distance learning and their advantages. *Journal of Critical Reviews, 7*(14), 565 – 572.

Mümine, K. K. & Selma, A. Ö. (2016). A review of distance learning and learning Management Systems. Retrieved from: https://www.intechopen.com/books/virtual-learning/a-review-of-distance-learning-and-learning-management-systems

Nwachukwu, P. O. Andrew, E. U. & Ossai, A. G. (2013). ICT and distance education in Nigeria: A review of literature and *accounts. International Open and Distance Learning (IODL) Symposium, 643–655.* Retrieved from*:* https://nairametrics.com/wp-content/uploads/2013/01/ict.pdf

Nwagwu, W. & Ahanihe, I. I. (2006). Emerging trends and setbacks in e-learning networks in Africa. *Journal of Information Technology Impact, 6*(2), 85-100

Obuekwe, G, F & Eze, R. I. (2017). Promoting best practices in teaching and learning in Nigerian universities through effective e-learning: Prospects and Challenges. Retrieved from: https://files.eric.ed.gov/fulltext/ED579390.pdf

Olutola, A. T. (). Challenges of e-learning technologies in Nigerian university education Research Thesis, Department of Educational Foundations, Federal University Dutsin-Ma, Katsina State, Nigeria. Retrieved from: https://pdfs.semanticscholar.org/5eca/fbc15d778446560ad64d2b96699ab9df7e69.pdf

Resnick, M., R. B. & Eisenberg, M. (2000). Beyond black boxes: Bringing transparency and aesthetics back to scientific investigation. *Journal of the Learning Sciences, 9*(2), 7–30.

Schulmeister, R. (2006). E-learning in the United State of America: The Standard? The Benchmark? Retrieved from: https://eleed.campussource.de/archive/3/688

Sharma R, Ekundayo, M. S. & Ng, E. (2009). Beyond the digital divide: policy analysis for knowledge societies. *Journal of Knowledge Management, 13*(5), 373-386.

UNESCO (2002). Information and communication technologies in teacher education: A planning guide. Paris: UNESCO. Retrieved from: http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/information-and-communication-technologies-in-teacher-education-a-planning-guide/

UNESCO (2005). United Nations Decade of education for Sustainable development 2005-2014. Retrieved from: http://portal.unesco.org/education/en/ev.php-